

CIAP526R-2A25

2-Port Gigabit DIN Rail Industrial Dual-Band Wi-Fi 6 Wireless AP with 1 x Serial Port



- Support 1 x Gigabit WAN/LAN combo port + 1 x Gigabit LAN port, 1 x RS232/485 serial port, and 2 x 2.4GHz/5GHz antenna interfaces
- Wi-Fi 6 dual-band WLAN with OFDMA + MU-MIMO technology
- PROFINET real-time protocol transmission via Layer 2 Tunnel technology
- AC-controllable with fast roaming, rapid discovery, bulk management, and upgrades
- Firewall and service functions including port forwarding, IP/MAC/domain filtering, NAT, DMZ, UPnP, DDNS, VPN, SNMP, LLDP
- Serial-to-network conversion supporting UDP, TCP, Modbus, HTTPD, WebSocket, MQTT, OPC UA, IEC104, HJ212 protocols, with virtual serial port capability
- 1 x DC 9-36V wide-voltage input with reverse polarity protection
- -40°C to +75°C operating temperature, aluminum alloy housing with efficient heat dissipation

Product Description

The CIAP526R-2A25 is a 2-port Gigabit DIN Rail industrial-grade dual-band Wi-Fi 6 wireless AP with 1 x serial port, featuring a high-performance 64-bit dual-core ARM Cortex-A53 processor operating at up to 1GHz. It supports dual-band wireless connectivity at 2.4GHz and 5GHz, delivering a combined burst rate of up to 2976Mbps. With web-based configuration and diverse network management functions, it offers multiple operating modes including Router, AP, Repeater, Bridge, and Client. This enhances network efficiency, reliability, and security to meet complex network demands. The serial port supports various protocol conversion networks, catering to industrial control, IoT, and other application scenarios. LAN and WAN ports support wired connections for internal and external networks, featuring 10/100/1000M, full/half-duplex, and auto MDI/MDI-X. This delivers high-bandwidth, low-latency, and highly reliable network communication for industrial automation applications.

CIAP526R-2A25 features 1 x Gigabit WAN/LAN combo port, 1 x Gigabit LAN port, 1 x RS232/485 serial port, and 2 x 2.4GHz/5GHz antenna interfaces. Built with reliable industrial-grade design, it operates within a temperature range of -40°C to +75°C and has passed rigorous functional, temperature, safety, and electromagnetic immunity testing. It meets diverse network field and harsh industrial environment requirements, making it widely applicable in industrial automation, integrated energy, smart cities, intelligent transportation, smart mining, and smart factories.

Features and Benefits

- Support 64-bit dual-core ARM Cortex-A53 processor, 1GHz clock speed
- Support 1 x Gigabit WAN/LAN combo port + 1 x Gigabit LAN port
- Support 1 x RS232/485 serial port
- Support 2 x 2.4GHz/5GHz antenna ports
- Support Dual-band Wi-Fi 6 WLAN with OFDMA + MU-MIMO technology
- Support five operating modes: Router, AP, Repeater, Bridge, and Client
- Support Wi-Fi Mesh wired self-organizing networking capability;
- Support PROFINET real-time protocol transmission with Layer 2 Tunnel technology;
- Support enhanced client roaming, wireless NAT, and AP 5G preference;
- Support AC-controllable, fast roaming, fast discovery, bulk management and upgrades;
- Support short protection interval, segmented/RTS threshold, pure G/11N mode;
- Support country code, transmit power adjustment, user count limit, SSID hiding, user isolation, WDS bridging, black/white lists;
- Support firewall and service functions including port forwarding, IP/MAC/domain filtering, NAT, DMZ, UPnP, DDNS, VPN, SNMP, LLDP;
- Support serial-to-network conversion supporting UDP, TCP, Modbus, HTTPD, WebSocket, MQTT, OPC UA, IEC104, HJ212 protocols, with virtual serial port capability;
- Support MixView management for bulk configuration and bulk upgrades;
- Support high-grade EMS protection ensures stable operation in complex electromagnetic environments, immune to external electromagnetic interference;
- Support single DC 9~36V wide-voltage input with reverse polarity protection
- Support aluminum alloy housing for efficient heat dissipation, IP30 protection rating

Specifications

Protocol Standard	
IEEE Standard	IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.11a/b/g/n/ac/ax
Interface	
WAN Port	1×10/100/1000Base-T(X) auto-sensing RJ45 WAN/LAN combo port, full/half-duplex, auto MDI/MDI-X
LAN Port	1×10/100/1000Base-T(X) auto-sensing RJ45 LAN port, full/half-duplex, auto MDI/MDI-X
Serial Port	Serial Port Type: 1 x RS232/485 serial port Connection Method: 3.81mm pitch terminal block Baud Rate: 300bps to 230400bps Data Bits: 7-bit, 8-bit Stop Bits: 1-bit, 2-bit Parity Bit: None, Odd, Even Number of Nodes: RS485 supports up to 128 nodes Terminating Resistor: Built-in 120Ω terminating resistor for RS485, switchable via internal jumper cap
Antenna Connector	2×2.4GHz/5GHz dual-band Wi-Fi antenna connectors, RP-SMA-K (external thread, internal pin)
CONSOLE	1×CONSOLE port using USB Type-C interface
Button	Reboot or Factory Reset button
Status LED	Power indicator, Operation indicator, 2.4G indicator, 5G indicator, Serial port transmit/receive indicator, Ethernet port indicator

Wi-Fi 6

Wireless Standards	IEEE 802.11b/g/n/ax (2.4GHz), IEEE 802.11a/n/ac/ax (5GHz)
Maximum Transmit Power	15 -18 dBm
Working Frequency	2.412GHz–2.484GHz (2.4GHz ISM Band) 5.18GHz–5.825GHz (5GHz ISM Band)
Modulation	DBPSK, DQPSK, CCK, OFDM, 16-QAM, 64-QAM, 256-QAM, 1024-QAM
Channel Bandwidth	20MHz/40MHz/80MHz/160MHz
Theoretical Transfer Rate	2.4GHz band 2T2R maximum transmission rate: 574Mbps 5GHz band 2T2R maximum transmission rate at 160MHz bandwidth: 2402Mbps Total Wireless Rate: 2976Mbps
Operation Mode	Router Mode, AP Mode, Repeater Mode, Bridge Mode, Client Mode

Power Supply

Power Input	DC9~36V
Power Consumption	Average $\leq 10.1W$ @ DC24V, Peak $\leq 15.9W$ @ DC24V
Connection	3.81mm pitch terminal block
Protection	Reverse polarity protection

Physical Characteristics

Dimensions	140×35×100mm (excluding DIN Rail mounting clip and connectors)
Installations	Easy installation on 35mm DIN rails
IP Code	Aluminum alloy housing, IP30 protection rating
Weight	About 0.66kg (excluding antenna)

Working Environment

Operating Temp	-40°C to +75°C
Storage Temp	-40°C ~+85°C
Relative Humidity	5%~95% (non-condensing)

Industry Standard

EMS

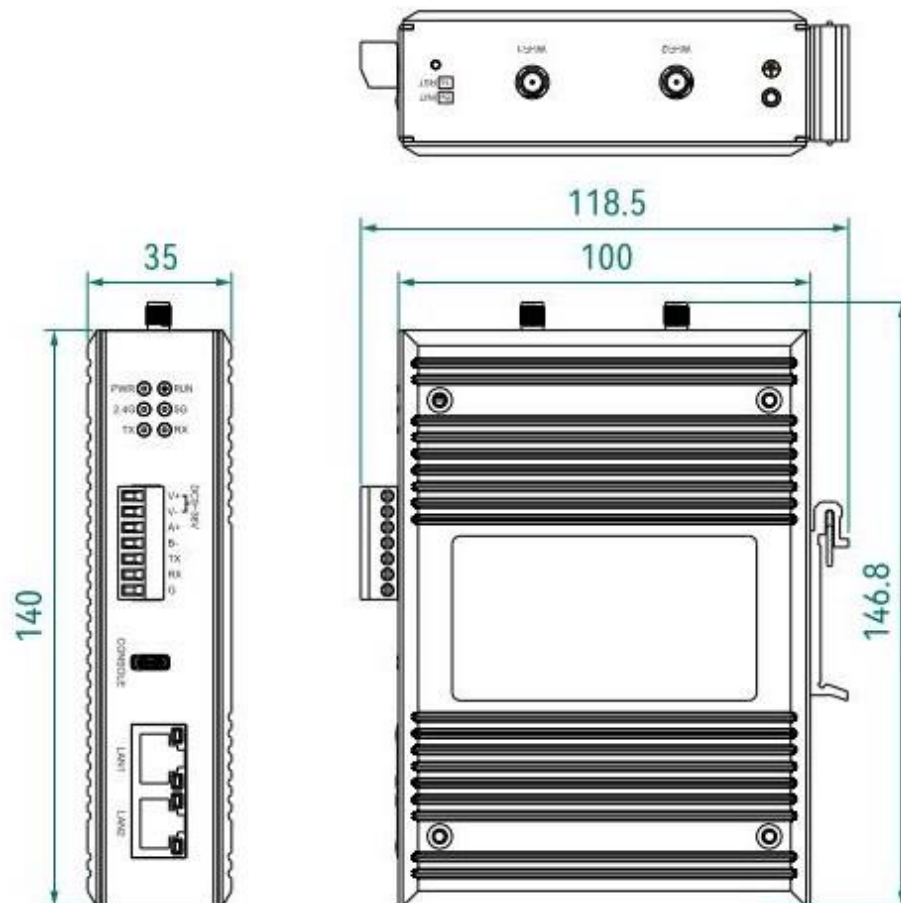
IEC 61000-4-2 (ESD): Level 4 (contact discharge $\pm 8\text{kV}$, air discharge $\pm 15\text{kV}$)

IEC 61000-4-5 (Surge): Level 3 (Power supply: Common mode $\pm 2\text{kV}$, Differential mode $\pm 1\text{kV}$; Ethernet port: Common mode $\pm 4\text{kV}$, Differential mode $\pm 2\text{kV}$; RS485: Common mode $\pm 4\text{kV}$, Differential mode $\pm 2\text{kV}$; RS232: Common mode $\pm 2\text{kV}$)

IEC 61000-4-4 (EFT): Level 4 (Power supply: $\pm 4\text{kV}$; Ethernet port, Serial port: $\pm 2\text{kV}$)

Dimensions

Unit: mm



Ordering Information

Standard Model	1G WAN	1G LAN	RS232/485	2.4GHz/5GHz Antenna	Input Voltage
CIAP526R-2A25	1	1	1	2	DC9~36V



Contact Us

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